

REMARKS/ARGUMENTS

Summary of Action:

The Examiner raised objections to the Information Disclosure Statements filed on March 24, 2005, and April 21, 2005.

The Examiner objected to the drawings for duplicate use of reference characters 161, 164, and 166.

The Examiner objected to the title for failing to be descriptive.

The Examiner objected to the disclosure because of informalities in paragraphs 39, 83 and 119.

The Examiner objected to the Abstract for failing to sufficiently describe the disclosure.

The Examiner raised a provisional non-statutory obviousness type double-patentably rejection of claims 1-16 over claim 11 of Applicant's copending Application No. 11/229,389.

The Examiner rejected claims 1-17 and 21-23 as being indefinite because the language "sash frame" is unclear.

The Examiner rejected claims 1-16 as anticipated by U.S. Pat. No. 5,280,686 (Davies), and claims 17 and 21-23 as anticipated by Japanese Patent. Pub. No. 2002-227551 (Tai et al.).

Remarks Regarding Information Disclosure Statements

The following foreign references were submitted in IDS submissions but not considered: Canadian Pat. No. 818,193, Canadian Pat. No. 1,305,364, Canadian Pat. No. 2,007,341, and Canadian Pat. No. 2,008,484.

Applicant has reviewed the submission associated with each reference, and provides the following response:

CA 0818,193 – This submission does not include a cover page with bibliographic data. Applicant submits that no official cover page is in Applicant's possession, nor is an official cover page available on the Canadian Patent Office on-line database.

The bibliographic data is available on-screen when searching through the electronic database. A corresponding print-out is submitted herewith in a Supplemental IDS, under other (NPL) References.

CA 1,305,364 - This is a French language patent reference. In accordance with MPEP 609.04(a), Applicant submits herewith a machine translation of the Abstract into the English language for this reference, included in the concurrently filed Supplemental IDS.

CA 2,007,341 - The copy submitted to IFW appears to have missing pages. A complete copy of this reference is submitted herewith in the concurrently filed Supplemental IDS.

CA 2,008,484 - This is an English language reference for which the copy scanned in IFW appears to be complete and legible. Applicant is unable to identify any deficiencies or reasons why this reference was objected to, and respectfully requests clarification.

Remarks Regarding Drawing Objections

The Examiner objected to the drawings because reference characters 161, 164, and 166 have been used to identify glazing support, support surface, and attachment recess features in both the sliding sash and the mullion.

Applicant respectfully submits that reference characters 161, 164 and 166 refer to distinct structures, each of which is provided in more than one location of the disclosed apparatus. In particular, reference character 161 refers to glazing support features, including a backstop surface 162, a planar support surface 164, and an attachment recess 166 (par. 0081).

The glazing support features 161 are configured to support a sealed glazing unit (in the example illustrated) in the sash frame 114 and in the fixed side of the master frame 112. The same glazing support features 161 are provided in the horizontal members 132, 134 (Fig. 5), and the vertical members 136 (Fig. 10) and 138 (Fig. 11) of the sash frame 114, and in the horizontal members 116b, 118b (Fig. 6) and vertical members 122 (Fig. 12), 124 (Fig. 11) of the fixed side of the master frame 112.

Applicant is concerned that changing the reference characters to be unique for each location where the structure is provided may increase confusion for a person reading the disclosure, or could imply that, for example, a common glass stop 168 might not fit in each location of the glazing support features 161.

Applicant respectfully requests that in view of the above, the Examiner reconsider and withdraw this objection.

Remarks Regarding Double Patenting Rejection

The Examiner rejected claims 1-16 for provisional obviousness-type double patenting as being unpatentable over claim 11 of copending Patent Application No. 11/229,839, and in view of U.S. Pat. No. 5,280,686 (Davies).

Applicant notes the provisional rejection, and will address this issue during examination of the '839 application.

Remarks Regarding s.112 Rejections

Claims 1-17 and 21-23 were rejected by the Examiner as being indefinite.

Applicant respectfully submits that the terms "master frame" and "sash frame" are used to define frames each having respective horizontal and vertical members. Thus the sash frame is the frame of the sash. Applicant believes the term sash frame has been used consistently and unambiguously with this meaning throughout the specification. Changing the terms "master frame" and "sash frame" to, for example, "first frame" and "second frame" would appear to increase confusion rather than make the claims more definite. Applicant respectfully requests reconsideration of this rejection. Should the Examiner maintain this objection, Applicant respectfully invites the Examiner in accordance with MPEP 2173.02 to suggest alternate claim language.

Remarks Regarding Amendments

In the Specification:

On page 1 of the specification, the title of the invention has been amended to read "Frame Assembly for Windows or Doors with Removable Sash" to remove the word "improved" and to include the removable nature of the sash frame as described in the disclosure.

In paragraph [0039], reference to Figure 71 has been corrected to read Figure 17.

In paragraph [0042], reference to Figure 2 has been corrected to read 18.

In paragraph [0083], reference character 17a has been corrected to read 170a.

In paragraph [0119], reference character 112 has been corrected to read 112'.

Applicant submits that these amendments add no new matter to the application, and that with these amendments, the claimed subject matter is properly

supported by the specification in compliance with 37 CFR 1.75(d)(1) and MPEP 608.01(o).

In the Abstract:

The abstract has been amended to provide a more detailed description of the disclosure and, in particular, to include that the "...sash frame can be lifted within the master frame to facilitate installation and removal of the sash frame. The mullion can include a weather buffering chamber to reduce fluid penetration from an exterior to an interior side of the frame assembly".

In the Claims:

Claim 23 is amended to more distinctly identify the relationship between the buffering chamber and air reservoir. This amendment is supported in the specification, for example, at paragraphs 160 and 161.

Remarks Regarding s.102 Rejections

The Examiner rejected claims 1-16 as anticipated by Davies. Applicant respectfully traverses. Claim 1 claims a master (or first) frame that is of unitary construction with horizontal and vertical members that are integral to each other.

Davies, in contrast, discloses a sliding door or window having an outer frame 10 with four discrete frame elements 13, 14, 15, and 16. Each frame element 13, 14, 15, and 16 is cut to a desired length from a pultruded lineal. The ends are mitered and joined together at the four corners of the door or window by insertion of mechanical corner members 17 (col. 3, lines 1-12). Similarly, the second (sliding door) frame 12 of Davies comprises four frame elements 44, 45, 46, and 47, each having mitered ends and joined together with corner support elements (col. 4, lines 10-15).

Davies fails to disclose each limitation of claim 1, and accordingly claim 1 is allowable over Davies. Withdrawal of this rejection is requested.

Regarding claims 2-16, each of these claims depends directly or indirectly from claim 1 and is allowable over Davies for the same reasons as claim 1.

Furthermore, regarding claim 2, the Examiner identified element 33 of Davies as corresponding to the mullion of claim 2. Element 33 of Davies defines a central post that is one of four frame members 31, 32, 33 and 34 forming a third frame for a fixed door panel 11. Each of the four members 31, 32, 33, and 34 are cut to length and mitered at their ends. Member 31 is attached to vertical member 13 of the outer (first) frame 10. Members 32 and 34 extend horizontally from either end of member 31, and attached to the members 15 and 16, respectively, of the outer frame 10. Member 33 defines a central post extending between either end of the members 32 and 34. Accordingly, Davies fails to disclose a master frame comprising an integral mullion, the mullion extending contiguously from the upper and lower horizontal members of the master frame, as claimed in claim 2. Applicant submits that claim 2 is allowable over Davies for this additional reason.

Furthermore, regarding claim 4, the Examiner identified element 63 as corresponding to the screen support details of claim 4. Reference character 63 refers to a triangular shaped projection that cooperates with a weatherstrip element 62 (col. 4, lines 15-68). Davies does not disclose screen support details integral with a one-piece, unitary master frame. Applicant submits that claim 4 is allowable over Davies for this additional reason.

Furthermore, regarding claims 7-16, Davies specifically teaches that insufficient space is provided between the vertically adjacent surfaces of the horizontal members of the sliding frame 12 and outer frame 10, so that the sliding frame (door) 12 cannot be lifted up within the outer frame for insertion and removal (col. 6, lines 62-65). Instead, installation/removal is made possible by a portion of the saddle 24 along the length of the upper horizontal member 15 that is removed, by cutting with a router (col. 7, lines 1-3). The removed length is shown between lines 78A and 78B (Fig. 6), which shows that the resulting slot does not traverse the mullion from a fixed side to a vent side of the master frame (contrast claim 9

of present application). Assembly of the Davies product is effected through insertion of a separate snap-in element 78 into the slot (col. 7, lines 6-11). Davies does not disclose providing the snap-in element (and corresponding slot) in the lower horizontal member of the outer frame (contrast claims 12 and 13). Davies also fails to disclose a glider element adapted to take up vertical clearance between the horizontal members as claimed in claim 15 (since no such vertical clearance is provided), nor a glider element selectively attachable to either one of the upper or horizontal members of the sliding frame 12 (as claimed in claim 16).

The Examiner rejected claim 17 as anticipated by Tai et al. Applicant submits that one skilled in the art would readily recognize that the profiles illustrated in Tai are extrusions, which are cut to length and joined together at their ends to form rectangular frames. Figures 3 and 5 show joints or seams between the connected vertical and horizontal members.

The profiles shown, for example in Figures 14 and 15, have enclosed internal chambers rendering one-piece, integral construction impossible, since ejection of the parts from a mold would be impossible. In contrast, claim 17 recites a unitary master frame and a unitary sash frame, each comprising respective horizontal and vertical members that are integral to each other. Since Tai fails to disclose all of the limitations of claim 17, Applicant submits that claim 17 is allowable over Tai.

The Examiner also rejected claims 21-23 as anticipated by Tai. Applicant submits that claim 21 recites a unitary master frame and a unitary sash frame, each having respective integral horizontal and vertical members. Applicant submits that claim 21 (and claims 22-23 which depend therefrom) are allowable over Tai for at least the same reasons as claim 17.

Furthermore, amended claim 23 recites an air reservoir substantially separated from the buffering chamber by a cover member having apertures therethrough. Tai discloses no such structure, so claim 23 is allowable for this additional reason.

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Applicant submits that this application is now in condition for allowance. Early notice to that effect is respectfully requested.

Respectfully submitted,

PETTA ET AL.

By J. Raakman

James A. Raakman
Reg. No. 56,624
(416) 957-1654